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FAX TRANSMITTAL SHEET

DATE: **July 18, 2003**

TO: **Laboratory Director and QA Manager**

FROM: **Wesley B. Press, Bureau Chief**

Subject: **Information Update #80**

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NOTE: **If any of the pages are missing, please call 1-800-952-0374, (602) 364-0734 or (602) 364-0732.**

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Information Update
July 18, 2003
Update #80

1. The USEPA in Cincinnati has clarified some of the requirements of method 300.0, which were not clear in the method. The following is the summary:

   a. The Linear Calibration Range (LCR) is to determine the linear dynamic range, within which the calibration range should fall. The LCR is a part of the initial demonstration and the lab needs to repeat it whenever there is a new analyst, a major repair is done or a new instrument is purchased.

   b. The calibration curve consists of 3 standards at a minimum.

   c. The curve is verified daily with a blank and an Initial Performance Check solution (IPC) and should be within 10%. If the Check is not within 10%, the curve must be repeated.

   d. The IPC and Laboratory Fortified Blank (LFB) are not interchangeable. An IPC is required every 10 samples, and whereas a LFB is required only one per every batch. The reason a LFB is required is because the LFB must be treated just like a sample to see if it picks up any contamination during preparation. For instance, if the sample gets filtered, the LFB must also be filtered. If the samples come in glass or polypropylene containers, the LFB must be prepped in the corresponding container.

2. It has come to our attention that some Arizona licensed laboratories are not reporting a correct value for total xylenes for a non-detect sample. For reporting total xylenes, the reporting limits of isomers must be combined. For example, if the total low calibration standard of 'm' & 'p' isomers is 0.0003 mg/L, and 'o' isomer is 0.00015 mg/L, then

the total xylenes can be reported as <0.0005 mg/L. This was confirmed by a written communication with EPA.

3. The electronic version of environmental licensure application form can now be downloaded from the ADHS website: http://www.hs.state.az.us/lab/license/env.htm

4. For clarification purposes, the Arizona licensure program has developed a policy on calibration. This policy explains the calibration requirements specified in the licensure rules:

Arizona Department of Health Services – OLLCT Instrument Calibration Policy

If an ADHS approved analytical method specifies a specific model for instrument calibration, then that specified calibration model is the only calibration model that can be utilized (A.A.C. R9-14-610.A). If an ADHS approved analytical method gives specific options for instrument calibration, then any of the specified calibration models can be utilized. In both of the above cases, a different model of instrument calibration, not specified in the method, can only be used if authorized in statute or regulation by the USEPA or ADEQ and approved as a method alteration by the director of ADHS (A.A.C. R9-14-610.B). If an ADHS approved analytical method does not specify any calibration model, then the laboratory must calibrate the instrument according to the manufacturer's specifications (A.A.C. R9-14-615.C4). In all of the above cases, the laboratory must provide in the Quality Assurance Plan all general procedures for analytical instrument calibrations (A.A.C. R9-14-615.B7), have records available that demonstrate the calculations performed by the calibration model (A.A.C. R9-14-615.C5 and 617.E7) and have the calibration model being used specified in a current standard operating procedure for all licensed methods (A.A.C. R9-14-615.C3).

The laboratory must train all lab personnel about the specific calibration models that each individual is utilizing or reviewing data for (A.A.C. R9-14-616.C4b and c). This training must also document what specific aspects of each calibration model being used might compromise the data quality, rendering the data to be not scientifically valid and defensible (A.A.C. R9-14-615.A). Some of these specific aspects could include detector saturation, detector sensitivity, the calibration model not accurately reflecting the calibration points, inappropriate extension of the calibration range, weighting factors and the inappropriate dropping of mid-level calibration points without justification. In all of the above cases, the calibration model utilized cannot be used simply to avoid needed instrument maintenance (A.A.C. R9-14-615.C7).

5. There is a typographical error in the Table 2, Retention Time Data, Quantitation Ions, And Internal Standard References For

Method Analytes, in the EPA Method 525.2, Revision 2.0, 1995. In the IS Reference # column, the internal standards 2 and 3 are reversed. Please make a note of it. This was confirmed by a written communication with the USEPA, in Cincinnati.

6. A new search feature has been added to ADHS's main web page that can be used to search all the Information Updates: http://www.hs.state.az.us/

7. For testing fecal coliform by SM 9221E and 9222D, for 40 CFR Part 503, Standards For Use Or Disposal Of Sewage Sludge, the holding time is 6 hours from the time of sampling. This was confirmed in a communication with an EPA wastewater information contractor.

8. Per A.A.C. R9-14-604.B and C, in-state laboratories shall submit a completed application at least 30 days before the expiration of the current license and out-of-state laboratories shall submit a completed application at least 60 days before the expiration of the current license. An application is not complete without payment of the appropriate application fee or fees and payment of the amount billed under A.A.C. R9-14-608.C.

   A laboratory can lose its license if an application has not been submitted before the expiration of the current license and will need to go through the initial licensure process to be relicensed.

9. It is acceptable to include copies of Tables or Figures from the reference methods as attachments to SOPs, as an alternative to retyping.

10. For the acceptance criteria for non-SPCC and non-CCC compounds in methods 8260B and 8270C in CCV, the laboratory can use either the method acceptance criteria specified for CCC compounds ($\leq$20% difference or drift) or statistically generated limits from historical data. The acceptance criteria chosen by the laboratory must be specified in the SOP for each individual compound.
11. In order to continually make improvements to the licensure program, an Inspection Appraisal Form has been developed (see attached). The inspectors will provide a copy of this form at the time of the exit interview. Please take a few minutes to fill out this form after each audit so that we can improve the auditing process. This form can be either faxed or mailed to our office.

12. If you have any questions regarding the Information Updates, or if you have any technical questions that need clarification, please call or send e-mail to Prabha Acharya, Program Manager, Technical Resources and Training, at the Laboratory Licensure numbers/address. Copies of the Information Updates can now be found at our internet address: http://www.hs.state.az.us/lab/license/tech/infoup.htm